NEWS ANALYSIS

Philippines: poverty, powerlessness, and Our Lady of Cigarettes

The road from Manila airport into the city is not unlike thousands of other main roads all over the developing world. It is continuously jammed with traffic belching exhaust fumes from low-octane fuel. When the traffic stalls every 100 metres or so, children as young as six move from car to car, and from public bus to public jeepny (see figure 1). The children are mobile shops, selling sweets, gum, and invariably, cigarettes - mostly by the single stick to the 64% of men and 19 % of women among metro Manila's 12 million people who smoke. In recent years domestic consumption has increased at an annual rate of 3 % to 5%, with about 70% of the cigarette market being low-income consumers.2

In this chaotic traffic, it is almost a daily occurrence that one of these small, tired, and often undernourished children is struck and killed while dodging vehicles. Small news items appear in the press and groups concerned for the welfare of children regularly advocate government action to prevent these deaths and injuries. Sadly, however, street children are but a symptom of the poverty and corruption in which the tobacco industry thrives in the Philippines today.

Eager to win the patronage of the masses are 153 cigarette brands from eight companies, two of which, For-



Figure 1 A young boy selling cigarettes on the streets of Manila.



Figure 2

tune Tobacco and La Suerte Cigar Company, dominate the picture. Both are private companies but both have relationships with the multinationals, RJ Reynolds and Philip Morris, respectively. Fortune Tobacco is owned by the billionaire, Lucio Tan, who is a major shareholder in Philippine Airlines and more than 40 other industrial interests. Tan, described as a "Marcos crony", is currently under government investigation for failure to pay taxes to the government totalling some 24.5 billion pesos. This sum represents the equivalent of 13% of the government's total excise revenue for the last seven years.4

Advertising

Tobacco advertising is freely allowed on all media in the country. Fortune Tobacco was the ninth largest advertiser in 1992, spending \$6.9 million.⁵ In the most Catholic nation in Asia, as figure 2 shows, The Madonna is cynically appropriated in the service of Fortune's brands. There are no advertising regulations or restrictions except for a television voluntary code by KMBP, an organisation of radio and TV operators, which states: "Advertisements should not exploit youth and claim

that it is natural to smoke or that it is abnormal not to smoke."

17

41

ĩ

20

Tobacco control

A bill currently moving through the country's congress would impose a ban on all mass media promotion of cigarettes, but a slow and difficult passage is expected. Advertisements for tobacco products have been obliged to carry a health warning since January 1994 and may not show the act of smoking or target minors directly. Several other bills have been before the different legislatures in recent years, covering a range of smoking control measures. These bills are being strongly opposed by the tobacco industry. An industry submission, impressive only by its weight and containing the usual arguments of the tobacco industry and with the mandatory annexes by JJ Boddewyn, has been presented to the Committee on Public Information of the House of Representatives.

Local and municipal ordinances state that public transport, theatres and cinemas, and enclosed public places in general be no-smoking. However, these are poorly enforced. Philippine Airlines introduced a nosmoking policy on all domestic flights in 1989. Many articles on tobacco have appeared in the local press since 1987, arousing public awareness to the hazards of smoking and many of the issues involved. The Adventist Church operates - as in many other countries in Asia - quit-smoking classes

Anti-smoking advocates have had limited success. There have been few government media campaigns against smoking. The main drive is to prohibit smoking in public places, especially in Manila, though this is loosely enforced. A 1990 survey by the University of the Philippines Department of Public Health found that 57% of the population were unaware that cigarettes cause cancer.

No strong government coordinating organisation on tobacco control exists. In 1988 a loose National Coalition on Tobacco Control was formed, led by the Philippine Medical Association, the Tri-Chest Societies, and the Philippine Heart Foundation. The Coalition has no paid or unpaid

S =

主 主

1

2 x

•

% ~

staff, and is spearheaded by a small group of energetic health professionals working in their spare time.

Low priority is given to tobacco control by the government, partly due to other priorities such as debt servicing and insurgency. There is a critical lack of funding and other resources for anti-smoking efforts, and the tobacco industry occupies a powerful position. The Republic Act 7171 signed by former President Cory Aguino directed that 15% of total tobacco revenue (about 10 billion pesos in 1991) were to be channelled into the development of the tobacco industry in seven provinces producing Virginia tobacco for export.

From 1 July 1993, all cigarettes and cigars manufactured, sold, or distributed in the Philippines are required to have a timid health warning ("Cigarette smoking is dangerous to your health") on all packaging. The requirements also apply to all forms of tobacco advertising in both the print and broadcast media, billboards, and promotional items including pens, shirts, hats, and other items where promotional mention of cigarette, cigar, or smoking is printed. However, House Bill 10050 (sponsored by 50 Congressmen) and Senate Bill 1561 (sponsored by the influential Senator Arroyo) seek to amend the Consumer's Republic Act No 7394 by miniaturising pack warnings and displacing them from the front to the side of packs. Clearly, many more Masses will be held in the Philippines before tobacco is brought under con-

> SIMON CHAPMAN Deputy Editor HARLEY STANTON Seventh Day Adventist Church, South Pacific Division Wahroonga, NSW, Australia

1 Zimmerman C. A study in contrasts. Tobacco Rep 1990; June: 33. 2 Anon. Tobacco Int 1993; April 15.

- 4 Anon. Far Eastern Econ Rev 1993; 11 March:
- 5 Anon. Top ten advertisers. A&M (Hong Kong) 1993; 23 April: 23.

Switzerland: mountin' pique

Authorities in the Swiss canton of Vaud ordered a judicial review of a promotion by Philip Morris (PM) which involved unsolicited packages going to the homes of people as young as 18 years, enclosing three free packs of PM's Marlboro Medium brand and a marketing questionnaire. Although at first sight in breach of a law controlling the distribution of food products, which specifically prohibits free tobacco products to young people under 20 years, the company defended itself by citing the government's decision, not fully implemented at the time of the promotion, to reduce the age of majority to 18. Swiss tobacco control advocates cannot help but recall the tobacco industry's strenuous assertions, at the time of a national referendum on tobacco and alcohol advertising last November, that manufacturers did not target young people. What particularly enraged health advocates about this promotion is that the packages arrived at the homes of many 18-year-olds just as they were preparing for their all-important baccalaureate exams, the essential gateway to further education, and so a time of undue stress. Many feel that the coincidence is just too great, but they also sense that the company may have made things worse for itself in the long run, in terms of public and political support for continued tobacco advertising. - DS

Plane warfare resumes

Stop Teenage Addiction to Tobacco (STAT) took to the skies again to fight tobacco advertising along Long Island, New York, beaches in June. Over the 4th of July (US Independence Day) holiday weekend, a Philip Morris (PM) plane was towing a banner for its Parliament brand which read, "Parliament: the perfect recess". In hot pursuit was the STAT plane, whose messages included "Parliament = heart disease", "Parliament = addiction", and "Parliament = permanent recess".

In a press release, STAT director Jim Bergman said that the Parliament slogan was particularly outrageous in its reference to "recess', whose meanings include the periods of free time given to school children for play. "What young person doesn't look forward to recess? Philip Morris claims it doesn't want youth to smoke, but then it goes and does something like this," he said.
STAT got its wings last summer

when Lorillard Tobacco Company flew ads for its Newport cigarettes along the same beaches; STAT scrambled a plane flying the message "Larry Tisch sells cancer sticks" Tisch is boss of Loews, Lorillard's parent company. The Newport plane eventually turned back to base whenever the STAT plane got airborne (see Tobacco Control 1993; 2:276).

India stirs

India has one of the most extensive and complex tobacco problems in the world, with a wide variety of methods of consumption and a minimum of 630 000 and probably as many as a million premature deaths per annum, caused by tobacco use. While manufactured cigarettes account for less consumption than traditional forms of smoking and chewing, the still massive cigarette market, gilded with huge export potential, is exceedingly attractive to the transnational tobacco companies. Earlier this year, British American Tobacco (BAT) tried unsuccessfully to buy back a majority share of its 31 %-owned Indian subsidiary, ITC, and RJ Reynolds has already set up shop in India.

Just as the foreign companies are getting more interested, however, the Union (federal) Ministry for Health and Family Welfare have announced the first serious attempt at the national level to curb tobacco consumption: a bill to ban tobacco ads in outdoor areas, in movies, and in print. India already bans television and radio cigarette advertising, but the new bill, which would amend existing legislation, would bring in more comprehensive tobacco control measures. The international tobacco industry has been lobbying hard to try to prevent such a large and influential country from taking action, using all the arguments and tactics employed for so long in the West. The Tobacco Institute of India (TII) organised press conferences for two British scientists, a mathematician and a chemist, who testified that there was insufficient evidence to link tobacco use with diseases. The TII is to publish a document on the scientific evidence about the dangers of passive smoking; the statistician who is to write the report is a well-known tobacco industry consultant. The industry is also targeting key areas of government: the director of the TII told a newspaper: "We are talking to people in the ministries of commerce, agriculture and health.'

Tobacco control advocates see little hope of the bill ever becoming law. A leading health activist recently bemoaned the difficulty of getting his colleagues to join in the fight. Even those at the sharp end of the medical community, he said, were unable to grasp that the real targets are the government and the tobacco industry, not the people. The large majority of senior medical and health personnel who might be expected to back the health ministry's efforts are in any case government employees and fear

³ Baskinas R. The fortune of Lucio Tan. Smart File (Manilla) 1993; 12/13: 4-15.

Ť

reprimand if they take action. Even a modest letter to the press in support of the health ministry, they fear, would be seen as a controversial move. In an analysis tinged with Indian fatalism, the advocate wrote: "The playing field of the tobacco companies is a cricket pitch or a football field. The health activists have not even found a playing field - they are in the paddy fields, talking to birds and grass. The industry's targets are the Ministries of Finance, Commerce and Agriculture. Our targets are the uneducated mass of people - so vast, we cannot begin to approach them. The companies are changing decision makers' minds; we are simply trying to improve knowledge. We believe naïvely that we are fighting them, but the industry knows full well that we still do not know what we are doing. They would encourage us to continue as we are." Many would say that this is too pessimistic, but there is no doubt that India will have one of the world's serious tobacco problems for many years to come. - DS

Turkish delights

To a tobacco marketing executive, Turkey has much to offer: a fastchanging country straddling Europe and Asia; an economy eager for Western investment; a cultural advantage, as a muslim nation, for exports to the lucrative Middle East market; and a well-developed but still expanding domestic market. Smoking rates among men are high (63 %), and the lower rates among women (40% to 50% in urban populations, around 25 % in rural areas) offer an attractive opportunity for total market growth. Already 30 % of 15- to 18-year-olds smoke. Perhaps most important of all to tobacco marketers, knowledge of the dangers of smoking is scant, even among doctors, apparently: only two years ago Marlboro sponsored a disco for medical students. Aggressive promotion continues (see figure 1), and Turkish women, whose emancipation has proceeded apace in recent years, now have their very own tobacco ads promising the ultimate in feminine allure in return for smoking one of the Western brands aimed at women. Both Philip Morris and RJ Reynolds have begun to manufacture in Turkey, having invested around half a billion dollars in new factories when the government relaxed its tobacco production monopoly in 1992.

Fortunately, things are changing at last, largely thanks to the efforts of a handful of energetic physicians. A tobacco control bill to prohibit smoking in public places and to ban direct



Figure 1

and indirect tobacco advertising, made some progress earlier this year, despite desperate attempts to kill it. As well as the manufacturers, the advertising industry was especially vigorous in its lobbying activities, but things did not go as smoothly as they and their friends in parliament might have expected. Tobacco control advocates appealed to both national and international colleagues, with the result that the fax lines to parliament were blocked for a whole dayofficials even had to ask a particularly active group of advocates in the city of Elazig to cease fire, to try to free the fax lines. Grudgingly, attempts to defeat the bill gave way to referral to a sub-commission, albeit a near death sentence itself. Meanwhile, public information work has gathered strength, with the comparatively rare sight in Turkey of street marches by tobacco control advocates on the occasion of World No-Tobacco Day (31 May) during the past few years. This year, children carrying placards with slogans such as "Why can we not have a tobacco law?" and "Protect me from smoke" marched to the parliament building in Ankara (see figure 2), helping to generate a record volume of anti-tobacco publicity associated with the Day. - DS



Figure 2

USA: start of the Big Bang?

The US tobacco industry had a disastrous first half of the year. There has never been any doubt, of course, that the tobacco companies have known for several decades how exceptionally dangerous their products are; but at last their reckless dishonesty seems to be catching up with them. The big trouble started with a television programme in March accusing tobacco manufacturers of manipulating nicotine levels in cigarettes. This caused the first wave of bad publicity, which was fuelled by the Food and Drug Administration's (FDA's) request to Congress for guidance about how the FDA should regulate tobacco products. Philip Morris (PM) filed a \$10 billion libel lawsuit against the television company and then, in response to a continuing barrage of bad press, the industry resorted to advertisements in major newspapers disputing assertions that ingredients used in making cigarettes were unsafe (see next article). When bad turned to worse, the industry released a list of additives used in cigarettes, a ploy doubtless intended to damp down the fires, but which probably made things worse.

Perhaps the most humiliating publicity of all then followed, when the chief executive officers (CEOs) of the seven largest US tobacco manufacturers appeared at Congress before the House of Representatives' Health and Environment Subcommittee. The executives testified that they believed cigarettes were addictive, and they firmly denied manipulating the amount of nicotine in cigarettes to keep their customers addicted. They did admit, however, that cigarette makers can control the amount of nicotine in cigarettes by altering the blends of tobacco, but said they used these blends for flavour, not addiction. They said that cigarettes "may" cause lung cancer, heart disease, and other health problems. PM's CEO admitted that a PM study on addiction was suppressed, despite repeated recent denials by the company. The executives even indicated that they would prefer that their children did not smoke, and they agreed to give Congress extensive research on humans and animals that their companies had conducted concerning nicotine and addiction. One executive admitted giving Congress incorrect data on trends in nicotine levels.

When asked whether they believed that cigarettes killed more than

News analysis 203



Before giving testimony to a Congressional subcommittee on 14 April 1994, the chief executives of the seven largest US tobacco firms take an oath to tell the truth. Pictured from left to right are: Donald S Johnston, American Tobacco Company; Thomas Sandefur Jr, Brown and Williamson Tobacco Corporation; Edward Horrigan, Liggett Group Inc; Andrew Tisch, Lorillard Tobacco Company; Joseph Taddeo, US Tobacco Company; James W Johnston, RJ Reynolds; and William I Campbell, Philip Morris.

400000 Americans a year, the executives said they did not know, causing Representative Henry Waxman, chairman of the committee, to retort: "All of you have some responsibility to say something more than you don't know". Just as other makers of consumer products, such as cars, foods and pharmaceuticals, were required to understand and respond to the dangers associated with their goods, Waxman said; "You have an obligation to know." But only a few seconds after being told that users of snuff were 50 times more likely to develop oral cancer than those who abstained, US Tobacco's president said "Oral tobacco has not been established as a cause of mouth cancer". Waxman promised the executives that the six-hour grilling was not the end of future investigations by Congress into the tobacco industry. "For decades the tobacco companies have been exempt from the standards of responsibility and accountability that apply to all other American corporations," he said.

4

Leaked internal documents from the British American Tobacco (BAT) subsidiary Brown & Williamson (B & W) were the next course of the media's anti-tobacco feast. These showed that company executives debated whether to disclose to the Surgeon General what they knew in 1963 about the hazards of cigarettes. The executives apparently chose to remain silent, to keep their research results secret, to stop working on a less dangerous cigarette, and to pursue a legal and public relations strategy of admitting nothing. In more than 100 documents from the 1960s and 1970s tobacco company executives speak of the hazards of cigarettes and state that nicotine is addictive. One document indicates that B & W's research had found that cigarettes caused or predisposed people to lung cancer, contributed to heart disease, and might cause emphysema. The statements contradict the tobacco industry's contention over the last 30 years that it has not been proven that cigarettes are harmful or nicotine addictive. In desperation, B & W served a sheaf of subpoenas, ultimately unsuccessful, on members of Congress, the media and advocacy groups. Some of the documents received widespread publicity, and will no doubt feature prominently in forthcoming legal actions.

Back in Congress, the testimony of the chairman of the Council for Tobacco Research (CTR), a board of scientists funded by the tobacco industry since 1954, opened up another rich seam of publicity. He said that in addition to financing legitimate scientific research, the council had also performed "special projects" recommended by tobacco company lawyers. According to internal documents, the purpose of the CTR, originally called the Tobacco Industry Research Council, was to "sponsor a public of relations campaign" that was entirely "pro cigarette". Representative Waxman called the research organisation "a ploy – a seemingly independent research body whose real purpose was to promote the idea that smoking is safe".

When the storms of bad publicity began to die down, at least for the time being, it must have been obvious to the tobacco industry, despite their defiant public relations line, that the landscape had changed dramatically. The most serious changes are three serious legal developments. First, in response to a letter to the Attorney General from seven members of Congress, the Justice Department started investigating the case for a criminal prosecution of the tobacco companies. The letter said the industry had been "guilty for several decades of criminal offences which have directly led to the disease and death of millions of Americans". The Attorney General confirmed that the Justice Department's civil, criminal, and anti-trust divisions were all taking part in the investigation.

Second, a massive new "class action" of product liability lawsuits is being prepared by a coalition of 50 leading law firms acting for plaintiffs. Each firm will pay \$100000 in the first year, towards the tens of millions of dollars that will eventually be needed to match the industry's legal firepower. Unlike the first (1960s) and second (1980s) waves of tobacco litigation, this third wave will not only have financial resources of a similar order to the industry's, but 150 skilled and highly motivated lawyers ready for all myriad tasks necessary to fight their case to the bitter end. They have already bought a six-story document repository to house and process the millions of papers which will be generated.

The third, devastating legal move has come from state governments, to try to recoup the billions of dollars it has cost to care for the millions of their citizens injured as a result of tobacco use. Florida led the field with cleverly drafted legislation that will preempt the industry's usual defence that causality cannot be proved as the scientific evidence is "only statistical". Mississippi, without such legislation, has filed suit in any case; and Massachusetts, taking a leaf out of



Dr David Kessler, Commissioner of the US Food and Drug Administration (FDA), shows a Congressional subcommittee cigarettes made by Brown and Williamson Tobacco Company (B & W) from a high-nicotine tobacco strain known as Y-1. Dr Kessler reported that B & W secretly developed the new strain in Brazil, and then denied its existence to the FDA.

Florida's book, has swiftly passed a similar law. If nothing else, the tobacco industry's lawyers will be busier than usual over the next few years, and their bosses may be sleeping less soundly.

The veritable orgy of anti-tobacco publicity, the appearance of tobacco company bosses before Congress, and the appearance of establishment bodies riding over the hill to join battle, are all such striking developments that inevitably they pose the question: if now, why not before? Michael Pertschuk, co-director of the Advocacy Institute and former Federal Trade Commission chairman in the Carter Administration, explains that for 30 years, Americans' response to the scientific indictment, first of smoking, then of passive smoking, was impaired by a cultural environment in which tobacco and smoking were as commonplace and American as hot dogs and apple pie. The public response was also retarded by the psychological "denial" of millions of addicted smokers, including majorities of Congress, the White House and federal agencies, and the press. This sedated public response was carefully and skillfully manipulated by the tobacco industry, says Pertschuk, as well as by the hidden constraints which the tobacco conglomerates' advertising budgets imposed on most mass media. At the same time the USA was slowly but surely becoming a nation of educated non-smokers. When the first Surgeon General's report was issued in 1964, up to twothirds of US senators smoked. Last year, only five (of 100) senators were smokers. Something similar happened in the House of Representatives, and the same radical change is true for the press corps, the Clinton White House, and the cabinet. Almost all those in administrative and legislative positions of authority are non-smokers, many of them with the zeal of the exsmoker.

Beginning with the era of Surgeon General C Everett Koop, with his unparalleled moral authority, the media, especially the broadcast media, which no longer had to worry about the loss of cigarette advertising revenue, began to step up investigative reporting and to toughen the tone of the reporting on the tobacco industry. Many journalists stopped feeling so compelled to routinely offer a textbook "balanced" story complete with comments from the Tobacco Institute treated with equal credence. Notes of outrage crept into the reports. And the industry failed to gauge accurately this shift in mood. Pertschuk points to an example in February this year,

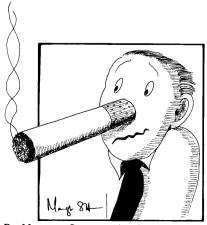
when all former Surgeons General still alive joined the current postholder in denouncing tobacco advertising targeted at children; yet simultaneously, RJ Reynolds was introducing the new Josephine Camel character, Joe Camel's female companion. Perhaps most calamitous of all, the 30-year-old wall of silence the industry had been able to impose on disaffected employees began to crumble. Hard evidence began to leak out of industry lies and conspiracies.

Some US columnists have started to warn about a possible backlash to all this publicity and action. Grotesque though the prospect might be of a sympathy vote for the tobacco firms, tobacco control advocates are taking the warning seriously. It is too early to say where the roller coaster will come to rest, but clearly, due to the USA's economic and political strength, what happens there will surely change the face of this area of public health the world over. The eventual sum total of the US disclosures, and their legal and financial ramifications, could make it impossible for the US tobacco multinationals to continue their present marketing practices either at home or abroad.

- DS

Name your poison: global action on additives

In April 1994, a reporter for National Public Radio (NPR) in the US filed a report on the secret list of chemical additives used in cigarettes. She identified several of these additives which were felt by toxicologists to be potentially harmful to health. Along with investigations by the US Food and Drug Administration (FDA) concerning tobacco industry manipula-



By Margaret Scott, reprinted with permission.



AUTH © 1994, The Philadelphia Inquirer. Reprinted with permission of Universal Press Syndicate. All rights reserved.

tion of nicotine in cigarettes (see previous article), disclosures and concerns about cigarette additives are fueling a movement to regulate the contents of cigarettes in the US.

Shortly after the NPR announcement, the six major cigarette companies released a list of 599 additives they use in the manufacture of cigarettes. According to an industry publication, the list was made public "in the interest of disclosure amid rising anti-smoking hysteria". To counter that "hysteria", the industry list included a sugar-coated commentary on each additive, asserting its safety.

The list examined by NPR contained more than 700 ingredients. The backslide from that number to the 599 additives on the list made public means either that the cigarette industry has stopped using certain additives that had appeared on earlier lists supplied to the federal government, or has stopped reporting them. One additive on earlier lists but not on the "599 list" is nicotine sulphate (see below).

35

Legislative history

In 1984 Congress amended the Federal Cigarette Labelling and Advertising Act to require the disclosure, to the US Department of Health and Human Services (DHHS), of the ingredients added to tobacco during the manufacture of cigarettes. Cigarette producers argued successfully that any public disclosure would reveal valuable trade secrets, so the law and implementing regulations established a complex arrangement guaranteed to protect the secrecy of the list of ingredients. DHHS is authorised to report to Congress any health concerns it may have about any of the additives; however, it has not yet done so - a fact which tobacco industry representatives emphasise whenever this issue is discussed in the media or in public forums.

Each year for the better part of a decade, all tobacco companies selling

cigarettes in the US have given the information on cigarette ingredients to the director of the DHHS Office on Smoking and Health (OSH), who is the designated "guardian" of the list. The list has been kept in a heavy safe at OSH, and only authorised government personnel have been allowed to see it. Each person who has seen it has been required to sign an agreement not to disclose the contents of the list; violators are subject to fines, loss of job, and/or imprisonment.

The law does not require the additives to be identified by brand or manufacturer. Consequently, the major cigarette companies use the law firm Covington & Burling to provide DHHS with a single consolidated list of additives used by one or more of the companies.

In addition, the law requires the government to inform lawyers for the tobacco companies whenever someone requests the list. When one member of Congress requested the list, tobacco company lawyers apparently contacted their friends on Capitol Hill, and the inquiring office was soon contacted by tobacco-friendly law-makers asking about their intentions. The process was presumably set up to keep the industry well informed.

Are additives important?

The list lacks fundamental information such as how the ingredients are used, what quantities end up in cigarettes, and which brands contain which additives. According to media reports on the earlier (still-secret) lists, the 700 ingredients range from harmless additives found in everyday foods to hazardous materials regulated by federal agencies. Thirteen of the substances, which include pesticides, fungicides, and insecticides, are banned by the US Food and Drug Administration (FDA) for use in foods. Five ingredients are prohibited by the US Environmental Protection Agency (EPA) from being dumped into landfills.

An official at the American Health Foundation (Valhalla, New York) expressed concern that some of the ingredients could be toxic or cause cancer when burned. At least one ingredient, angelica root extract, is known to cause cancer in laboratory animals.

To many public health officials, however, the additives list is a peripheral issue, and perhaps one that is counterproductive to the goals of tobacco control. Former DHHS Secretary Louis Sullivan, who served under President George Bush, testified in Congress that a focus on additives distracts from the fact that

the natural constituents of tobacco (and their combustion products) are the main culprits in causing disease. Giving significant attention to additives, so the argument goes, may lead people to believe that removal of one or more additives from cigarettes will make smoking safe.

The subject of additives becomes undeniably important, though, when one considers their potential role in promoting nicotine addiction. Two ingredients on the list-tobacco extract and ammonia - may be critical in this regard. An "extract industry manager" told ABC's television programme DayOne (28 February 1994) that cigarette makers use tobacco extract to give reconstituted tobacco a "kick" from nicotine. According to the cigarette industry's annotated list of 599 additives, tobacco extracts are "used as flavorants at minimal levels, producing no measurable increase in nicotine in cigarettes".

FDA Commissioner David Kessler, in testimony before Congress on 21 June 1994, reported that documents from an unnamed tobacco company indicate that ammonia is used to boost the amount of nicotine a smoker receives. The industry's ingredients list explains that ammonia "Occurs in human/animal breath due to protein metabolism; dissolved in water it is a naturally occurring substance that plays a vital role in protein metabolism in animals, including man." The industry list does not mention that ammonia is a common household cleaning agent.

One notable omission from the industry's publicly disclosed list is nicotine itself. According to ABC's DayOne (7 March 1994), nicotine sulphate appeared on at least two earlier lists of additives which the industry submitted to DHHS. In testimony before Congress on 14 April 1994, the executives of the major cigarette companies denied that nicotine sulphate is used to increase nicotine levels in cigarettes. As they explained, "a miniscule amount" of nicotine sulphate is used to denature alcohol, which is then used as a solvent to apply flavours to tobacco during processing. They argued that the Bureau of Alcohol, Tobacco, and Firearms requires that nicotine sulphate be used to denature alcohol to make it undrinkable before it is used in tobacco manufacturing.

Regulating tobacco products and additives – in the US and elsewhere

FDA regulation of tobacco products is a possibility now for the first time in the US. On 17 May 1994,



By Mike Thompson of the State Journal Register (Springfield, Illinois), reprinted with permission, © 1994.

Representatives Mike Synar and Richard J Durbin introduced "The Fairness in Tobacco and Nicotine Regulation Act of 1994", which would give the FDA authority to regulate the manufacture, sale, labelling, and advertising of tobacco products. The bill would also require companies to list the chemical additives in tobacco on their packages. If the bill languishes in Congress, Commissioner Kessler may attempt to regulate tobacco without specific statutory authority, by declaring tobacco a drug (see *Tobacco Control* 1994; 3: 99–100, 148–58).

The issue of chemical additives has stirred controversy and legislative action in other countries as well. Several European nations and New Zealand require tobacco companies to disclose the additives they use. The release of documents listing cigarette additives by the government of New Zealand created a furor in the media in both Australia and New Zealand earlier this year (see next article).

Thailand implemented a new Tobacco Products Control Act, which requires the disclosure of cigarette additives, among other things. Tobacco control advocates in Asia reported in late 1993 that the US Embassy in Thailand was urging the Thai government to accept a tobacco-industry-backed proposal to weaken health provisions relating to additive disclosure in the law.



By Tom Meyer of the San Francisco Chronicle, reprinted with permission.

The Thai law was modelled after ingredient disclosure regulations in Canada which took effect in 1989. Philip Morris responded to the Canadian Tobacco Products Control Act requiring the disclosure of additives by pulling out of the Canadian market completely. RJ Reynolds, the only US tobacco company that did not stop exporting to Canada as a result of the additive disclosure regulations, reformulated its Canadabound cigarettes to exclude additives found in cigarettes produced for domestic consumption, rather than comply with Canadian disclosure regulations.

In Sweden, a comprehensive Tobacco Act was proposed in 1990 which would authorise the government to require tobacco companies to report additives as well as tar and nicotine content and to prohibit the sale in Sweden of tobacco products which do not meet certain standards.

The UK has a list of "permitted" or "approved" additives for smoking tobacco (cigarette, cigar, and pipe tobaccos) and cigarette paper. The 1988 list, which included 474 ingredients, also indicates maximum levels at which an individual additive may be used in any product.

Despite these regulatory advances in different countries, and recent developments resulting in the identification of more tobacco additives, no international guidelines have been proposed to monitor these additives. As mentioned above, some of the additives are known to be toxic, and others may help to create or sustain nicotine addiction. All of them serve to make this inherently lethal product more palatable or more saleable. Just as the transnational tobacco companies work together to promote their products worldwide, the health community must coordinate its efforts internationally to protect the public health.

KAREN LEWIS
Advocacy Institute
Washington, DC, USA

RONALD M DAVIS

New disclosures on additives from New Zealand

Two documents obtained via New Zealand's freedom of information laws unleashed a major news event in March 1994 in Australia. Under the Tobacco Control Act (1990) the New Zealand Government requires tobacco companies operating there to supply the Health Department with an annual list of all additives that they might be using in their tobacco products. The list is not released to the public and does not specify which additives are selected from this list for use. Two identical lists of 2168 additives and chemicals were submitted for the year 1991 by the two main companies operating in New Zealand. WD & HO Wills (New Zealand) Limited (a British American Tobacco subsidiary) and Rothmans of Pall Mall (New Zealand) Limited. The list shows additives approved for use by the industry in Europe. The New Zealand government has apparently sanctioned the list for local use.

The document submitted by Wills included a letter signed by a Wills executive making it plain that the company does not want smokers or the wider public to know about the additives. The letter stated "...the information is provided in confidence and may not be communicated to others."

Attachments to the Wills and Rothmans submissions show the weights of additives added (see table 1). The data show that pipe and roll-your-own tobacco are heavily adulterated, putting an end to the myth espoused by many roll-your-own

smokers that the tobacco they use is "more natural".

The information was released by the New South Wales Cancer Council at a press conference on 30 March 1994 addressed by myself and Professor Geoff Duggin, a prominent Sydney toxicologist who was invited to comment on the vast list of additives. Over the next two days, the story was covered in 29 radio bulletins and interviews, 14 press stories, and nine television news items throughout Australia. The issue was resurrected a further five times between 5–15 April when the Australian media carried news of the public release in the USA

of a list of 599 additives (see previous article). The huge media reception accorded to the issue reflected several news frames or angles that made it highly compelling to the Australian media. These are shown in table 2.

The tobacco industry was completely ambushed by the release. Several journalists told me that people from all companies they contacted for comment "had gone into the bunker" and were "running about like headless chickens" under the onslaught of the unexpected deluge of bad media they were suddenly receiving. Among the few comments obtained by the media included "Spokesmen for

Table 1 Weights of additives found in different tobacco product classes

Tobacco product	Total weight of tobacco (tonnes)	Total weight of additives (tonnes)	Ratio of weights (tobacco: additives)
Wills cigarettes	879,219	1.803	0.2
Wills cigarette tobacco	366.036	82.456	23
Wills pipe tobacco	6.695	2.227	33
Rothmans cigarettes	2271.040	10.184	0.4
Rothmans cigarette tobacco	280.495	30.108	11
Rothmans pipe tobacco	21.862	3.565	16

Table 2 Headlines on tobacco news items

News angle or frame	Examples of headlines *Call for new tobacco disclosures *Answers sought on cigarette chemicals *Hidden extras add to smoke haze *Experts smoke out additives		
Cover-up and secrecy			
Consumers' right to know	Call to let smokers know what they're inhaling		
Weird ingredients	*Whale grease for that big tobacco taste (ambergris was one of the approved additives) *Same chemicals in tobacco as rat poison: health experts *"included chemicals found in rat poison, fungicides, urine and sheep dip"		
The chemical cocktail	*Smokers puff on a chemical cocktail *Cancer cocktail in cigs *Poisons on tobacco list		
Australia-New Zealand rivalry	(all stories mentioned that the New Zealand government had required disclosure so why couldn't Australia too)		

Rothmans and Philip Morris said their companies were 'not necessarily' using all chemicals and additives on the list"; "Today's latest bid to scare smokers... ignores the fact that manufacturers of consumer goods all pride themselves on product differentiation and unique blends"; and repeated accusations that we were "scare-mongering".

While nicotine was not listed as an additive, "tobacco extract" was listed. Within days of the media conference, I received a letter from a senator representing the Australian Democrats, a liberal political party that has set the political agenda in tobacco control in Australia. Along with the environmental Greens party, the Democrats currently hold the

balance of power in the national parliament and therefore command enormous power to influence a range of government policies on single issue bills. The senator advised that she would be happy to introduce a bill requiring full disclosure of all additives, not just to government, but to consumers. We will keep readers informed of what transpires. – sc

Rex Ronan - experimental surgeon

Raya Systems, Inc, of Mountainview, California, has recently provided a new meaning to the term "playing doctor". For use with the Super Nintendo Entertainment Systems, Rex Ronan – Experimental Surgeon provides "Nintendo style" action coupled with an education programme which is pro-health (antitobacco). With all the action of modern high-tech video games, Dr Ronan cruises through the mythical patient removing tar, plaque, phlegm, and cancerous cells with his lazer surgical precision and martial arts.

The video game cleverly chooses as the experimental patient a tobacco company salesman who has contracted multiple tobacco-related diseases after years of heavy smoking. Dr Rex Ronan is shrunk to microscopic size and journeys into his patient to attack the tobacco-related damage. The adventuresome "field trip" through the patient's tobacco-ravaged body begins at the mouth and follows the path that smoke and other carcinogens would take through the smoker's body, starting at the mouth, and passing through the trachea, lungs, bronchial tubes, heart, arteries, before arriving at the brain, where the issue of tobacco addiction is discussed. At each level, the player must correctly answer questions about the diseases which tobacco use causes in order to move on to the next level of play. The game appropriately points out that the patient became addicted to tobacco as a teenager.

The game has many appeals. Without doubt, it will gain popularity among educators because of its accurate depiction of the harmful effects of tobacco products, and its ability to grasp the attention of young players. This video game represents one in a series of such games offered by Raya Systems. Another in the series is "AIDS Avenger", a video game which presents the facts on avoiding the AIDS virus. The relatively new concept of providing educational material with super high-tech computer systems has been coined "edutainment" by the makers of this system. To ensure the accuracy of the educational material, the game was developed with assistance from experts in medicine and psychology from major universities in California, as well as with input from children and teenagers who generally play Super Nintendo.

For the purposes of this critical review, Rex Ronan - Experimental Surgeon was played by several "Nintendo-savvy" teenagers. Feedback was very positive and included comments such as "way cool", "fast", "fun", and "challenging". Directions are clear and easy to follow and the learning curve is rapid.

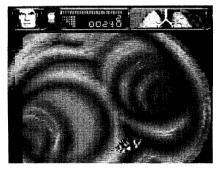
The major drawbacks of the game include cost (\$59.95) and availability – the game is specific for Super Nintendo. It cannot be copied and

distributed throughout a school system, for example. Another antitobacco video game profiled in *Tobacco Control* (1993; 2: 276–7), "Fight the tobaccoid", also has limited availability, but a version for use in personal computers is under development.

A warning for parents – don't even think about challenging kids at Super Nintendo. At least with Dr Rex Ronan, a good health lesson is learned!

LUKE L BURCHARD Champagne, Illinois, USA

For more information about these video games, contact Raya Systems, Inc, 2570 W El Camino Real, Suite 309, Mountainview, CA 94040, USA; tel: (1 415) 949 2672; fax: (1 415) 949 3935). – ED



A scene from "Rex Ronan – Experimental Surgeon". In level two, players must fly their ship down a smoker's trachea, lined with thick mucus and globs of phlegm. Players zap the globs with the ship's laser, and carefully navigate the obstructed course to the lungs